The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 – 16 (canceled)

17. **(original)** A low water peak, hydrogen resistant optical waveguide fiber, the fiber comprising:

a silica containing glass core; and

a glass cladding surrounding the silica containing glass core;

wherein the optical waveguide fiber exhibits an optical attenuation at a wavelength of about 1383 nm which is less than or equal to an optical attenuation exhibited at a wavelength of about 1310 nm; and

wherein the optical waveguide fiber exhibits a maximum hydrogen induced attenuation change of less than about 0.03 dB/km at a wavelength of 1383 nm after being subjected to a 0.01 atm hydrogen partial pressure for at least 144 hours.

18. **(original)** The optical waveguide fiber of claim 17, wherein the optical attenuation exhibited at a wavelength of about 1383 nm is at least 0.04 dB/km less than the optical attenuation exhibited at a wavelength of about 1310 nm.

19. **(original)** The optical waveguide fiber of claim 18, wherein the optical attenuation exhibited at a wavelength of about 1383 nm is less than or equal to about 0.35 dB/km.

20. **(original)** The optical waveguide fiber of claim 19, wherein the optical attenuation exhibited at a wavelength of about 1383 nm is less than or equal to about 0.31 dB/km.

21. **(canceled)**

22. **(previously presented)** The optical waveguide fiber of claim 17, wherein the optical waveguide fiber exhibits a maximum hydrogen induced attenuation change of less than about 0.03 dB/km at a wavelength of about 1383 nm after being subjected to a 0.01 atm hydrogen partial pressure for at least 336 hours.

23. **(previously presented)** The optical waveguide fiber of claim 17, wherein the optical waveguide fiber exhibits an optical attenuation of less than about 0.36 dB/km at each wavelength within a wavelength range from about 1300 nm to about 1600 nm.

24. **(previously presented)** The optical waveguide fiber of claim 17, wherein the core is doped with germania.

25. **(previously presented)** The optical waveguide fiber of claim 17, wherein the core and the cladding each have a respective refractive index which form a step-index profile.

26. **(canceled)**

27. **(canceled)**

28. **(previously presented)** The optical waveguide fiber of claim 17, wherein the cladding glass comprises silica.

29. **(previously presented)** The optical waveguide fiber of claim 17, wherein the fiber contains no fluorine-based dopant.

30. **(previously presented)** The optical waveguide fiber of claim 17, wherein the glass core contains no fluorine-based dopant.

31. **(previously presented)** The optical waveguide fiber of claim 17, wherein the glass cladding contains no fluorine-based dopant.

32. **(previously presented)** The optical waveguide fiber of claim 17, wherein the fiber is formed from an OVD process.

33. **(previously presented)** The optical waveguide fiber of claim 17, wherein the silica containing core glass includes a weighted average OH content of less than 1 ppb.

34. **(canceled)**

35. **(canceled)**

36. **(original)** An optical waveguide fiber comprising:

a core region having a centerline and at least two segments having a positive relative refractive index, a refractive index profile, and an inner and an outer radius, the radii being measured with reference to the centerline;

a clad layer surrounding and in contact with the core region, the clad layer having a relative index and a refractive index profile;

wherein the optical waveguide fiber exhibits an optical attenuation at a wavelength of about 1383 nm which is not more than 0.10 dB/km above an optical attenuation exhibited at a wavelength of about 1310 nm.

37. **(previously presented)** The optical waveguide fiber of claim 36 wherein the optical waveguide fiber exhibits a zero dispersion at a wavelength greater than 1310 nm.

38. **(canceled)**

39. **(previously presented)** An optical fiber communication system comprising the fiber of claim 17.

40. **(new)** The optical waveguide fiber of claim 17, wherein the optical waveguide fiber exhibits a maximum hydrogen induced attenuation change of less than about 0.03 dB/km at a wavelength of 1383 nm after being subjected to a 0.01 atm hydrogen partial pressure for 144 hours.

41. **(new)** The optical waveguide fiber of claim 40, wherein the optical attenuation exhibited at a wavelength of about 1383 nm is at least 0.04 dB/km less than the optical attenuation exhibited at a wavelength of about 1310 nm.

42. **(new)** The optical waveguide fiber of claim 40, wherein the optical attenuation exhibited at a wavelength of about 1383 nm is less than or equal to about 0.35 dB/km.

43. **(new)** The optical waveguide fiber of claim 40, wherein the optical attenuation exhibited at a wavelength of about 1383 nm is less than or equal to about 0.31 dB/km.

44. **(new)** The optical waveguide fiber of claim 40, wherein the optical waveguide fiber exhibits an optical attenuation of less than about 0.36 dB/km at each wavelength within a wavelength range from about 1300 nm to about 1600 nm.

45. **(new)** The optical waveguide fiber of claim 40, wherein the core is doped with germania.

46. **(new)** The optical waveguide fiber of claim 40, wherein the optical waveguide fiber exhibits a zero dispersion at a wavelength greater than 1310 nm.

47. **(new)** The optical waveguide fiber of claim 17, wherein the optical waveguide fiber exhibits a maximum hydrogen induced attenuation change of less than about 0.03 dB/km at a wavelength of about 1383 nm after being subjected to a 0.01 atm hydrogen partial pressure for 336 hours.